Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend the claims as follows:

1-13. (Canceled)

14. (Currently Amended) A method for the production of a 5-layer membrane electrode unit for direct methanol fuel cells, which comprises

(a) coating an anode gas diffusion substrate with an anode catalyst ink to form a coated anode gas diffusion substrate;

(b) drying the coated anode gas diffusion substrate;

(c) providing a non-coated cathode gas diffusion substrate;

(ed) coating a first side of an ionomer membrane with a cathode catalyst ink;

(de) drying the first side of the ionomer membrane;

(ef) coating a second side of the ionomer membrane with the anode catalyst ink;

(fg) drying the second side of the ionomer membrane; and

(gh) uniting the coated anode gas diffusion substrate and the non-coated cathode gas diffusion substrate with ~~(1)~~ the ionomer membrane coated on both sides ~~so that the second~~ in such a way that the anode side of the ionomer member ~~that is coated with the anode catalyst ink~~ faces the coated anode gas diffusion substrate and ~~(2) with a cathode gas diffusion substrate so that~~ the cathode side of the ionomer membrane faces the non-coated cathode gas diffusion substrate ~~is in contact with the first side of the ionomer membrane with the cathode catalyst ink~~.

15. (Previously Presented) The method of claim 14, wherein the anode catalyst layer has a thickness of between 20 and 200 micron.

16. (Previously Presented) The method of claim 14, wherein the cathode catalyst layer has a thickness between 5 and 50 micron.

17. (Previously Presented) The method of claim 14, wherein the anode catalyst layer has a precious metal loading of between 0.25 and 6 mg of precious metal/cm^2.

18. (Previously Presented) The method of claim 14, wherein the cathode catalyst layer has a precious metal loading of between 0.1 and 2.5 mg of precious metal/cm^2.

19. (Previously Presented) The method as claimed in claim 14, wherein supported or unsupported bi-metallic platinum/ruthenium catalysts are used as anode catalyst.

20. (Previously Presented) The method as claimed in claim 14, wherein supported or unsupported platinum-containing catalysts are used as cathode catalyst.

21. (Cancelled)

22. (Previously Presented) The method of claim 14, further comprising washing the coated anode gas diffusion substrate or the ionomer membrane with water.

23. (Previously Presented) A membrane electrode unit for direct methanol fuel cells obtainable by the process according to claim 14.

24. (Cancelled)

25. (New) The method of claim 14 wherein the cathode gas diffusion layer comprises carbon fiber paper rendered hydrophobic PTFE.